

Bond 2012 Update



Council Briefing February 17, 2015



Bond 2012 Update



Additional Information Requested and Included:

- Utility Cost Update
- HMAC vs. Concrete Design
 - Engineer Recommendations (Design Elements)
 - Lifecycle Analysis with Traffic Counts
 - Individual Cost Breakdown per Street for Concrete
 - Impacts to SPMP
- Bike Lane Applications & TAC Report
 - Greenwood & Alameda
 - Potential Bond 2016 Project Funding for Updated Bike Master Plan



Utility Update (\$ 000)



			STRE	ET PROGRAM	Л			UTII	ITY PROGRA	М	
Project	Status 12/2014	Approved Budget	June 2014 Estimate	Over/ Under	Current Estimate	Over/ Under	Utility Budget	June 2014 Estimate	Over/ Under	Current Estimate	Over/ Under
Navigation	C-1%	\$4,000	\$6,174	\$2,174	\$5,355	\$1,355	\$3,100	\$9,902	\$6,802	\$1,802	\$448
S Alameda	D-95%	\$2,300	\$2,888	\$588	\$2,370	\$70	\$2,800	\$1,858	\$942	\$2,710	\$90
Greenwood	D-95%	\$2,100	\$2,855	\$755	\$2,054	\$46	\$1,700	\$1,752	\$52	\$2,802	\$1,102
Ocean	D-80%	\$5,500	\$7,222	\$1,722	\$6,767	\$1,267	\$2,700	\$3,256	\$556	\$2,608	\$92
Tuloso	D-95%	\$1,800	\$2,036	\$236	\$1,601	\$199	\$1,400	\$2,243	\$843	\$1,760	\$360
Staples (Brawner to Kostoryz) (Deferred)	D-80%	\$3,400	\$7,520	\$4,120	\$417	\$2,983	\$2,700	\$5,435	\$2,735	\$5,430	\$2,730
Staples (I37 - Morgan)	D-60%	\$5,300	\$6,688	\$1,388	\$6,720	\$1,420	\$4,100	\$4,350	\$250	\$7,469	\$3,369
McArdle (Ph 1 & 2)	C-20%	\$6,000	\$6,000	\$0	\$5,499	\$501	\$4,700	\$7,072	\$2,372	\$5,643	\$943
Kostoryz	D-95%	\$3,300	\$3,350	\$50	\$4,305	\$1,005	\$2,600	\$2,250	\$350	\$2,832	\$232
Horne	C-10%	\$900	\$1,028	\$128	\$1,233	\$333	\$700	\$1,238	\$538	\$871	\$171
Morgan (Deferred)	D-95%	\$2,300	\$2,367	\$67	\$112	\$2,188	\$1,800	\$3,391	\$1,591	\$3,543	\$1,743
Twigg (Prev. on Hold) (Deferred)	D-55%	\$1,400	\$1,543	\$143	\$165	\$1,235	\$1,100	\$2,629	\$1,529	\$2,350	\$1,250



Utility Update (\$ 000)



			STREET PROGRAM					UTILITY PROGRAM			
Project	Status 12/2014	Approved Budget	June 2014 Estimate	Over/ Under	Current Estimate	Over/ Under	Utility Budget	June 2014 Estimate	Over/ Under	Current Estimate	Over/ Under
Leopard (Prev. on Hold)	D-50%	\$2,600	\$3,456	\$856	\$3,177	\$577	\$2,000	\$1,818	\$182	\$2,528	\$528
Holly (Prev. on Hold)	D-95%	\$2,500 (\$6,347)*	\$1,754 (\$6,449)*	(\$746) (+\$102)*	\$2,500 (City Share)	\$ -0-	\$4,500 (\$7,226)*	\$7,023 (\$10,415)*	\$2,523	\$7,128	\$2,628
Williams	D-95%	\$1,700 (\$4,588)*	\$895 (\$3,315)*	(\$805) (\$1,273)*	\$1,700 (City Share)	\$ -0-	\$2,300 (\$3,172)*	\$5,140 (\$6,480)*	\$2,840	\$5,746	\$3,446
Yorktown	C-98%	\$3,800	\$3,800	\$0	\$4,887	\$1,087	\$2,500	\$4,687	\$2,187	\$2,442	\$58
JFK Causeway	D-100%	\$650	\$643	(\$7)	\$590	\$60	\$630	\$693	\$63	\$846	\$216
ADA Master Plan	SPMP	\$2,300	\$2,300	\$0	\$2,300	\$ -0-					
Signal Improvements		\$2,000	\$2,000	\$0	\$2,000	\$ -0-					
TxDOT Participation		\$1,150	\$1,150	\$0	\$1,150	\$ -0-					
TOTAL PROP. 1		\$55,000	\$65,669	\$10,669**	\$54,902	\$98	\$41,330	\$64,737	\$23,926	\$65,256	\$18,407

C = "Construction", D = "Design"

^{*}Total Project w/ TxDOT's portion: City has a 20% match in streets and storm water and is 100% responsible for wastewater, water, and gas.



Bond 2012



➤ With our thriving economy, local construction costs have increased as much as 15% and TxDOT is reporting a 30% increase Statewide.

	COST SAVINGS MODIFICATIONS								
	TYPE	# PROJECTS	SAVINGS						
1	Road Type Alternative: Hot Mix Asphalt Cement (HMAC)	6	\$4.1M						
2	Lane Width Reduction	6	\$1.6M						
3	Modified Road Diet	3	\$660K						
4	Bike Lane Modification	2	\$2.5M						
5	Project Deferral	3	\$6.4M						
	TOTAL		\$15.26M						
	Additional Value Engineering*	All	\$12.64M						

^{*}Value Engineering – Project efficiencies, coordination, and design options.





- Potential Savings \$4.1M
- Streets to Consider Converting from Concrete to HMAC
 - o S. Alameda (Ayers St to Louisiana Ave)
 - o Tuloso Rd. (IH37 to Leopard St.)
 - o Kostoryz Rd. (Brawner Pkwy to Staples St.)
 - Leopard St. (Crosstown Fwy to Palm Dr.)
 - o Williams Dr. (Staples St. to Airline Rd.)
 - o S. Staples St. (Morgan Ave to Comanche) (Comanche to I-37 remains Concrete)
- Design Factors
 - Soil Type
 - Traffic Counts & Type
 - o Utility Locations and Depths
 - o Future Road Use and Expansion
 - Market Conditions
 - Construction Budget
 - Lifecycle Costs





EQUIVALENT 30-YEAR DESIGN SECTIONS

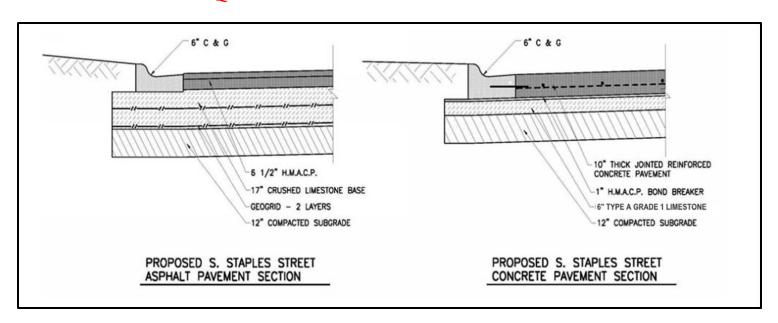
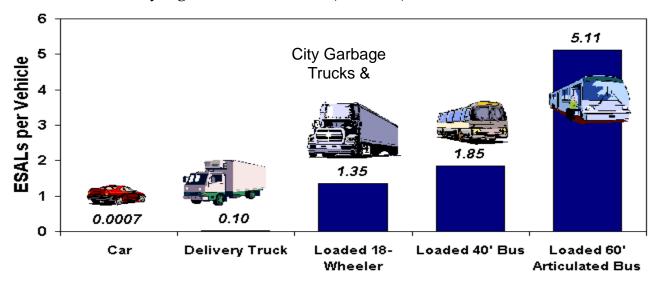






Figure 2. "ESAL is the acronym for equivalent single axle load. ESAL is a concept developed from data collected at the American Association of State Highway and Transportation Officials (AASHTO) Road Test to establish a damage relationship for comparing the effects of axles carrying different loads." (TXDOT)







Traffic Counts and Cost TO Remain with Concrete Street Pavement

Street	Limits	Ave. Daily Traffic	Vehicle Type (Cars)	Vehicle Type (Trucks)	Concrete \$
S. Alameda	Ayers St to Louisiana Ave	8,386	8,134	252	\$364K
Tuloso	IH 37 to Leopard St.	1,390	1,362	28	\$60K
S. Staples St.	Morgan Ave to IH 37	6,108	5,741	367	\$750K
Kostoryz Rd.	Brawner Pkwy to Staples St.	14,371	13,940	431	\$238K
Leopard St	Crosstown to Palm Dr.	8,327	7,827	500	\$955K
Williams Dr.	Staples St. to Airline Rd.	17,778	17,067	711	<u>\$250K</u>
					\$2.6M
Morgan	Staples St. to Crosstown	Deferred			\$410K
Staples st.	Brawner Pkwy to Kostoryz	Deferred			<u>\$1.1M</u>
					\$1.5M
				Total	\$4.1M



Bike Lane Modifications



- Savings \$2.5M
- Projects
 - o S. Alameda St. (Ayers St. to Louisiana Ave.)
 - o Recommendation to Construction New Bike Lane Behind Sidewalk
 - o Greenwood Dr. (Gollihar Rd. to Horne Rd.)
 - Recommendation to Delete from ROW and Future Construction of New Bike Lane Along Airport Ditch and in the Parks
- Modifications for Both Projects Endorsed by Transportation Advisory Committee (TAC) on February 10, 2015



Bond 2012 Project Option Worksheet



	Street Cost			Potential M				
	Budget	Current Dsg Cost Estimate	Keep Concrete	Keep Bike Lane	No Lane Width Reductions	Deferral Funding	Estimate after Modifications	Estimate w/o Deferred Stree
012 Proposition 1: Street Projects								
S Alameda St (Ayers St to Louisiana Ave)	\$2,300,000	\$3,086,000	\$364,000	\$125,000	\$100,000		\$2,497,000	
Greenwood Dr (Gollihar Rd to Horne Rd)	\$2,100,000	\$2,307,000		\$160,000	\$93,000		\$2,054,000	
Ocean Dr (Buford St to Lousiana Ave)	\$5,500,000	\$8,167,000			\$1,400,000		\$6,767,000	
Tuloso Rd (IH37 to Leopard St)	\$1,800,000	\$1,911,000	\$70,000	\$70,000	\$170,000		\$1,601,000	
S Staples St (Morgan Ave to IH 37)	\$5,300,000	\$7,470,000	\$750,000				\$6,720,000	
Kostoryz Rd (Brawner Pkwy to Staples St)	\$3,300,000	\$4,668,000	\$238,000		\$125,000		\$4,305,000	
Leopard St (Crosstown Freeway to Palm Dr)	\$2,600,000	\$4,127,000	\$950,000				\$3,177,000	
Holly Road (Crosstown to Greenwood Dr)	\$2,500,000	\$2,500,000					\$2,500,000	
Williams Dr (Staples St to Airline Rd)	\$1,700,000	\$1,950,000	\$250,000				\$1,700,000	
							\$31,321,000	
	REC	COMMENDED FOR D	EFERRAL					
S Staples St (Brawner Pkwy to Kostoryz Rd)	\$3,400,000	\$6,945,997	\$1,069,000	\$1,870,000		\$2,983,000	\$4,006,997	
Morgan Ave (Staples St to Crosstown)	\$2,300,000	\$2,883,958	\$410,000			\$2,188,000	\$2,473,958	
Twigg St (Shoreline Blvd to Lower Broadway)	\$1,400,000	\$1,230,045				\$1,235,000	\$1,230,045	
							\$7,711,000	
	_	UNAFFECTED STRE	ETS					
JFK Causeway Area Imps	\$650,000	\$590,000					\$650,000	
ADA Master Plan Improvements	\$2,300,000	\$2,300,000					\$2,300,000	
Signal Improvements & Street Lighting	\$2,000,000	\$2,000,000					\$2,000,000	
TxDOT Participation	\$1,150,000	\$1,150,000					\$1,150,000	
Navigation Blvd (Up River Rd to Leopard St)	\$4,000,000	\$5,355,000		Under Construction			\$5,355,000	
McArdle Rd (Whitaker Dr to Ennis Joslin Rd)	\$6,000,000	\$5,499,000		Under Construction			\$5,499,000	
Horne Rd (Ayers St to Port Avenue)	\$900,000	\$1,233,000		Under Construction			\$1,233,000	
Yorktown Blvd (Rodd Field to Cimarron)	\$3,800,000	\$4,887,000		Construction 95%	Complete		\$4,887,000	
							\$23,074,000	
	\$55,000,000	\$70,260,000	\$4,101,000	\$2,225,000	\$1,888,000	\$6,406,000	\$54,395,000	\$7,71
		(\$15,260,000)					\$605,000	\$62,100



Future Actions



- ➤ Approve Modifications
- ➤ Continue Bike Route Master Plan Update with MPO
- Consider Bond 2016 Items
 - ✓ Bike Route Master Plan Implementation
 - ✓ Deferred Streets





Questions?

"Continuing to Build Our Future"